**Power BI Assignment 2**

Q1 Explain the advantages of Natural Queries in Power Bi with an example?

Ans: The Natural Language Query feature in Power BI lets you explore your data in your own words using natural language. For example, you're in a meeting and you have your report and dashboard, but you don't have the specific information you need. You can easily find it using the Q&A feature.

Q2   Explain Web Front End (WFE) cluster from Power BI Service Architecture?

Ans: The WFE cluster uses Azure AD to authenticate clients and provide tokens for subsequent client connections to the Power BI service. Uses Azure directory to store and manage user identities. The Azure Traffic Manager directs user traffic to the nearest datacenter.

 Q3 Explain Back End cluster from Power BI Service Architecture?

Ans: The Back-End cluster determines how authenticated clients interact with the Power BI service. The Back-End cluster manages visualizations, user dashboards, datasets, reports, data storage, data connections, data refresh, and other aspects of interacting with the Power BI service.

 Q4 What ASP.NET component does in Power BI Service Architecture?

Ans: A WFE cluster consists of an ASP.NET website running in the Azure App Service Environment. When users attempt to connect to the Power BI service, the client's DNS service may communicate with the Azure Traffic Manager to find the most appropriate (usually nearest) datacenter with a Power BI deployment.

 Q5 Compare Microsoft Excel and Power Bi Desktop on the following features:

Ans:

**Data import**: Excel has limitations in the amount of data it can work with. While Power BI can handle much larger amounts of data. Power BI can connect to a large number of data sources, while Excel's connectivity capacity is limited. So, Power BI is more efficient in data importing.

**Data transformation**: Power BI has faster processing than Excel. Power Query makes it easy to transform data and has more functions than Excel.

**Modeling**: Power BI has more visualization tools than Excel, which will help you in analysing exactly the data you need. This makes data Modeling much easier.

**Reporting**: Power BI is more efficient in making interactive reports than Excel.

**Server** **Deployment:**

**Convert** **Models:** Using Transform in power one can easioy concert any models in Power BI.

**Cost**: Since Power BI has an upper hand in data visualization and performing multiple tasks which excel takes time, it is costlier than exel.

Q6 List 20 data sources supported by Power Bi desktop.

Ans:

1. Excel Workbook
2. Text/CSV
3. XML
4. JSON
5. Folder
6. PDF
7. Parquet
8. SharePoint folder
9. SQL Server database
10. Access database
11. Oracle database
12. MySQL database
13. PostgreSQL database
14. Sybase database
15. SAP HANA database
16. Amazon Redshift
17. Impala
18. Google Big Query
19. Vertica
20. Snowflake